

CLAIMS

We claim:

1. A data communication method that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application, wherein the client application and the server application employ a second protocol that is mapped onto the first protocol, said method comprising the acts of:

intercepting, by a client interceptor acting on behalf of a server application, a second-protocol data communication request from a client application;

mapping, by the client interceptor, the second-protocol data communication request onto the first protocol;

sending the communication request to a server interceptor using the first protocol;

compensating a disadvantageous characteristic of the first protocol;

mapping, by the server interceptor, the communication request back onto the second protocol to recreate substantially the second-protocol data communication request; and

5 delivering the second-protocol data communication request to the server application.

2. The method of claim 1, wherein the act of compensating further comprises the acts of determining loss of a connection and re-establishing the connection responsive to the act of determining loss.

10 3. The method of claim 1, wherein the act of compensating further comprises the acts of detecting that a connection is idle, dropping the connection, and re-establishing the connection when a new communication request is intercepted.

15 4. The method of claim 1, wherein the act of compensating further comprises the acts of determining that transmission capacity is insufficient to process the data communication request within a

predetermined interval of time, and establishing a parallel connection to increase transmission capacity.

5. The method of claim 1, wherein the second protocol is connection oriented, and wherein the client interceptor and the server interceptor intercept a plurality of connections between the client application and the client interceptor using the second protocol, and between the server interceptor and the server application using the second protocol.

6. The method of claim 5, wherein the plurality of connections using the second protocol are multiplexed onto a single connection of the first protocol.

7. The method of claim 1, wherein the first protocol is a wireless communication protocol.

8. The method of claim 1, further comprising the act of opening, by the client interceptor, a connection to the server interceptor using the first protocol following the act of intercepting a second-protocol data communication request.

5 9. The method of claim 8, further comprising the acts of:
receiving, by the client interceptor, an identification of the server application; and
forwarding the identification to an address-resolution server for first-protocol address resolution.